UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,672	02/11/2002	Densen Cao	5061.19 P	8231

7590 03/26/2004

Parsons, Behle & Latimer
Suite 1800
201 South Main Street
P.O. Box 45898
Salt Lake City, UT 84145-0898

EXAMINER	
LEWIS, RALPH A	

ART UNIT	PAPER NUMBER
3732	7

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/073,672	CAO, DENSEN
	Examiner	Art Unit
	Ralph A. Lewis	3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 1-20 is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5, 6.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Rejections based on 35 U.S.C. 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of the independent claims 1, 7, 12 and 17 it is unclear how the later claimed "handpiece" relates to the earlier claimed "housing."

Rejections based on Obvious-type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/072,852. The limitations of the present claims just slightly different obvious

versions of the pending claims in 10/072,852. Merely merely adding the limitation in the present claims that the dental curing light includes a "handpiece" would have been obvious to the ordinarily skilled artisan.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 11-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent No. 6,331,111. The patented claims of 6,331,111 set forth all the limitations of the present claims, but patented claims are presented in a more detailed narrower version than those of the present application. Merely setting forth the already patented structure in broader terms would have been obvious to one of ordinary skill in the art. More particularly, the claimed well in the patented claims (e.g. column 16, lines 53-54) meets the presently claimed "first reflective device" limitation, the patented "focus dome" (column 17, line 46) meets the presently claimed "focusing lens" limitation and the patented "flexible section" (column 17, line 11) meets the presently claimed "second light reflective device" limitation

Claims 11-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over

claims 1-20 of copending Application No. 10/016,992;
claims 1-20 of copending Application No. 10/017,272;
claims 1-20 of copending Application No. 10/017,454;
claims 1-20 of copending Application No. 10/017,455;
claims 1-23 of copending Application No. 10/067,692;

claims 1-17 of copending Application No. 10/071,847,
claims 1-17 of copending Application No. 10/072,462;
claims 1-18 of copending Application No. 10/072,613;
claims 1-19 of copending Application No. 10/072,635;
claims 1-23 of copending Application No. 10/072,826;
claims 1-17 of copending Application No. 10/072,831;
claims 1-20 of copending Application No. 10/072,850;
claims 1-20 of copending Application No. 10/072,853;
claims 1-20 of copending Application No. 10/072,859;
claims 1-20 of copending Application No. 10/073,672;
claims 1-20 of copending Application No. 10/073,819;
claims 1-20 of copending Application No. 10/073,822;
claims 1-19 of copending Application No. 10/073,823; and
claims 1-20 of copending Application No. 10/076,128.

The limitations of the present claims all appear to broader or slightly different obvious versions of the pending claims in the above identified applications. Merely leaving out limitations (e.g. the "wall outlet power adapter" of claim 1 in 10/016,992) in order to make the claims broader or providing for different groupings of the elements set forth in the claims of the above identified pending applications would have been obvious to the ordinarily skilled artisan.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Rejections based on Prior Art

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (WO 99/16136) in view of Logan et al (6,692,251)

In Figure 5 Mills discloses a dental light curing device having a housing 47, an air space between housing 47 and elongated secondary heat sink 45. The Mills device includes a thermo electric cooler 50 and a fan 49 for circulating air past the thermo cooler 50. While it is not explicitly disclosed, the ordinarily skilled artisan would readily recognize that the housing must necessarily have a vent in order for the fan 49 to work. Mills further discloses a plurality of covered LEDs 43 located on primary heat sink 49 and light transport device 41 for transporting light to a remote location. The Figure 5 Mills embodiment fails to include the claimed light reflective device and focusing lens. Logan et al, however, teach that for a similar dental curing device in Figure 2 that it is desirable to provide unpackaged LEDs on a heat sink 36 with a light reflective device 43 and a focusing lens 44. To have provided for such an arrangement in the Mills device in order to enhance the amount of light as taught by Logan et al would have been obvious to one of ordinary skill in the art.

Prior Art

Applicant's information disclosure statements of February 11, 2002 and August 6, 2002 have been considered an initialed copy enclosed herewith.

Adam et al (6,419,483 B1), Boutoussov et al (US 6,439,888 B1), Fregoso (US 6,611,110 B1), Melikechi et al (6,511,317), Otsuka (6,638,063), Decaudin et al (6,692,250), Plank (6,695,614), Fischer et al (6,702,576) and Reipur (WO 02/33312 A2) are made of record.

Any inquiry concerning this communication should be directed to **Ralph Lewis** at telephone number **(703) 308-0770.** Fax (703) 872-9306. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Kevin Shaver, can be reached at (703) 308-2582.

R.Lewis
March 22, 2004

Ralph A. Lewis
Primary Examiner
AU3732